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a lid member made of a magnesium die-cast integrally formed with a bearing support member and connected to said motor base in such a manner as to cover said motor base.--

### REMARKS

Claims 2, 4 and 6 are pending in this application. By this Amendment, claim 2 is amended, ~~and~~ claims 1, 3 and 5 are canceled and new claim 6 is added. Reconsideration in view of the amendments and following remarks is respectfully requested.

The attached Appendix includes a marked-up copy of the rewritten Title (37 C.F.R. § 1.121(b)(1)(iii)) and each rewritten claim (37 C.F.R. § 1.121(c)(1)(ii)).

### CLAIM REJECTIONS

The Office Action rejects claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over English et al. (U.S. Patent No. 4,682,065) in view of Takahashi (U.S. Patent No. 5,663,604), and further in view of Plunkett (U.S. Patent No. 4,554,941); claims 4-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over English in view of Takahashi and Plunkett, and further in view of Permuy (U.S. Patent No. 6,031,306). The rejection of claims 1, 3 and 5 has been rendered moot by the cancellation of these claims. However, as the rejection applies to remaining claims 2 and 4, they are respectfully traversed.

In particular, Applicant respectfully asserts that neither English, Takahashi, nor Plunkett disclose or suggest a blower including at least a casing of an approximately cylindrical shape, a stator core having a stator wire wound around and disposed inside of a permanent magnet, and a circuit board mounting an electronic circuit and closely disposed to the stator wire and the stator core, where the circuit board is housed within a case portion, and the case portion has a motor base integrally formed with the casing, and a lid member made of an aluminum die-cast integrally formed with a bearing support member and

connected to the motor base in such a manner as to cover the motor base, as recited in independent 2.

Specifically, Takahashi discloses a generally circular circuit base 54 located inside a housing 2 disposed adjacent to a lower surface of a supporting plate 8. A Hall IC 60 is attached to the circuit base 54 by an attachment portion 58. See column 3, lines 44-57; see also Figures 1 and 2. The circular circuit base 54 contains a small opening 56 into which the shaft 38 of a rotor 36 can be loosely inserted. See column 3, lines 45-48. A nameplate 68 is attached to the housing 2 so as to cover the reverse side of the circuit base 54. See column 4, lines 16-19.

English discloses a molded plastic housing for a small electric motor. See column 1, lines 50-51. As admitted in the Office Action, English does not disclose at least a stator core having a stator wire wound around and disposed inside of a permanent magnet and a circuit board mounting an electronic circuit, where a case portion is closely disposed to the stator wire and the stator core, and the circuit board is housed within the case portion.

Plunkett discloses a stator 12 supported on a circuit board 44 by spacer means 46. See column 4, lines 49-51. The circuit board provides electrical connection between the stator winding and circuit components 48. See column 4, lines 51-53.

Permuy discloses an electric motor including an electronic control device and an armature with an enclosed motor casing. See Abstract.

In contrast to Applicant's claimed invention, neither English, Takahashi, nor Plunkett disclose or suggest a blower including at least a casing of an approximately cylindrical shape, a stator core having a stator wire wound around and disposed inside of a permanent magnet, and a circuit board mounting an electronic circuit and closely disposed to the stator wire and the stator core, where the circuit board is housed within the case portion, and where the case portion has a motor base integrally formed with the casing, and a lid member made of an

aluminum die-cast integrally formed with a bearing support member and connected to the motor base in such a manner as to cover the motor base.

On the contrary, although Takahashi discloses a generally-circular circuit base on which integrated circuits and circuit parts are mounted, there is no case portion closely disposed to a stator wire and a stator core and housing the circuit board, where the case portion has a motor base integrally formed with the casing, and a lid member made of an aluminum die-cast integrally formed with a bearing support member and connected to the motor base in such a manner as to cover the motor base. Moreover, Plunkett discloses only electric circuit components mounted on a circuit board within a DC motor. Therefore, because Takahashi and Plunkett do not disclose this element, they fail to compensate for deficiencies in English. Because the applied art fails to disclose these features, a combination of English, Takahashi and Plunkett would not have resulted in a blower having a PC board safely protected from the contact of a stator wire, the heat generated from the stator wire or dust and moisture, all of which might cause a deterioration of the electronic circuit provided on the PC board or a short circuit.

Thus, Applicant asserts that independent claim 2 defines patentable subject matter. Claim 4 depends from independent claim 2, and therefore also defines patentable subject matter for at least the same reasons as claim 2 and for the additional features recited therein. Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. § 103(a) be withdrawn.

Regarding new claim 6, Applicants respectfully submit that it is a substantial duplicate of claim 2, but recites a lid member made of magnesium die-cast rather than an aluminum die-cast. Therefore, Applicants submit that claim 6 defines patentable subject matter for at least the same reasons as claim 2.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 2 and 4 and prompt allowance of claim 6 is earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachments:  
Appendix  
Petition for Extension of Time

Date: November 19, 2002

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## APPENDIX

## Changes to Title:

The following is a marked-up version of the amended title:  
BLOWER FOR USE IN OFFICE AUTOMATION EQUIPMENT

Claim 6 is added.

## Changes to Claims:

Claims 1, 3 and 5 are canceled.

The following is a marked-up version of the amended claim 2:

2. (Amended) A blower, comprising:

\_\_\_\_\_ a bearing disposed at the center of a casing of an approximately cylindrical shape;

\_\_\_\_\_ a shaft supported by the bearing;

\_\_\_\_\_ a motor yoke which is mounted on the shaft and has an impeller at an outer periphery thereof and a permanent magnet at an inner periphery thereof;

\_\_\_\_\_ a stator core having a stator wire wound around and ~~be~~ disposed inside of the permanent magnet; and

\_\_\_\_\_ a circuit board mounting an electronic circuit for supplying a predetermined amount of electric current to the stator wire and closely disposed to the stator wire and the stator core,

\_\_\_\_\_ wherein a case portion is closely disposed to said stator wire and said stator core, and said circuit board is housed within said case portion, and

\_\_\_\_\_ wherein said case portion further comprises:

\_\_\_\_\_ a motor base integrally formed with said casing, and

\_\_\_\_\_ a lid member made of an aluminum die-cast integrally formed with a bearing support member and connected to said motor base in such a manner as to cover said motor base.

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